

Paludina, opercule thick and shelly, just fitting the peritreme," can be easily recognized as the generic character of *Bulimus* alone, among the forms probably known to Haldeman at the time of description. In the absence of any previous fixation, *Helix tentaculata* Linnaeus is hereby designated to genotype of *Lutella*, which is a synonym of *Bulimus* Scopoli, 1777.

Tulotoma, Haldeman, dates from this supplement, Oct. 1840, p. 2.

Nematura, Benson, briefly described with no species mentioned.

(p. 3)

Ammicola Gould & Haldeman, is briefly described, with no species mentioned in Oct. 1840.

NERITINA VIRGINEA IN JAMAICA

(Continued from page 27)

By E. A. ANDREWS

LOCALITIES WHERE OTHER NERITIDAE WERE COLLECTED IN 1910 AND 1932

Neritina punctulata L. Port Antonio stream, 1910; and rivers: Montego at bridge, 1910; Great, 1910 and 1932; Flint 1910 and 1932; Mt. Pleasant, 1932. Town Creek, Mo Bay, 1910; Rio Grande Bridge, 1932; pebbles few miles from mouth of Buff Bay, 1932, Dr. Patterson.

Theodoxus meleagris (Lam.). Concrete slab west side mouth of Town Creek, Mo Bay, 1932; few inches from surface, migrating down with tide toward zone of green and red algae, exposed to full sun, crowded few to square inch, firmly adherent. Water contaminated, 29.6-9° C., air 30° C., density at top, 1.003-1.022, ten inches down, 1.023. Some shells with hermit crabs. Eyes white on black peduncles, tentacles light with black markings, body black blotched with white, sole smoky, operculum white.

Neritilia succinea Recluz. 1910: common in Town Creek, Mo Bay, but none in 1932. Mt. Pleasant stream abundant with egg capsules in 1932. Great River rapids abundant, 1910 and 1932; many on under sides large stones migrate with surprising rapidity

to shade of top when stone turned upside down in air, may be trains of 7-8 in row, like ducks.

Nerita tristis d'Orb. 1932: many at Sandy Bay shoals near shore.

Nerita peloronta L. 1932: spray-wet rocks, S. Nigril Light House with egg capsules, July; 1932: rocks 24 miles East of Kingston, Cays off Kingston Harbor, White House Point, Mo Bay.

Nerita tessellata Gmel. 1932: White House Point, Mo Bay; Cays off Kingston Harbor.

Nerita versicolor Gmel. 1932: White House Point, Mo Bay; Cays off Kingston Harbor; rocks 24 miles East of Kingston.

Nerita alticola Pilsbry. First found in 1910 by Dr. C. B. Wilson in brook from Spanish Dam, Catadupa; July 1932: many on small stones, same rapid brook, with egg capsules. July 1910: Great River near bridge at ford near bridge where road down from Catadupa joins road from Mo Bay to Black River, 20 miles from each, on stones and logs in shade, dozen in few minutes with many *Hemisinus lineatus* Gray; but in 1932 none to be found, banks cultivated. July 1932: just above Lethe Bridge, Great River, opposite Mrs. Grubb's and below remnants of old dam, scattered 6-12 to square foot, or in small groups and pairs with egg capsules, dozen or more to square inch under stones, firmly adherent, waist deep rushing stream. Stones with microscopic algae turned upside down in air, snails rapidly migrate onto darker face, former top. Many *Hemisinus* on top of stones. Also *Ampullaria fasciata* Roissy. Also three miles farther up Great River at Shettlewood Bridge same date, under stones abundant in muddy rapid with egg capsules.

July 1932: Sweet River (Bowen's) near highway bridge and 112 milestone from Spanish Town, under stone with capsules in waist deep rushing clear water, many plants, *Hemisinus lineolatus* and *Ampullaria gossii* Reeve.

EXPLANATION OF DATA IN TABLES

Size is expressed by the range from largest to smallest, measured by calipers across shell; by average of the above, or from observation; and as maximum from measurements of greatest

dimension from apex to farthest edge, as cc.; a concept of the bulk of an average shell in each population got by dividing the entire bulk measured in cubic centimeters in a tall graduate by the numbers of shells in that lot, by the percentages of shells of various sizes in each collection, recorded as a, b, c, d, that stuck on iron wire screens of square mesh of 11, 5.5, 4.5, 3.5 mm. sides, while e represents the percentage of (immature) shells that passed through the smallest mesh, 3.5 mm.

By Brilliance is meant the percentage of reflected light from a typical shell as compared with a slide of magnesium oxide taken as 100.

A notion of the relative frequency of the more striking patterns on shells is given in the columns I-V: I being the percentage of shells that are melanic (or black) with at most fine white spots; II, the percentage that are albinic with little color, or nearly lacking in pattern; III, the percentage banded or having spiral lines or groupings of markings; IV, the percentage with large light blotches demarked by dark sinuous or angular lines; and V, the percentage with more pigment reducing the light background to minute spots or areas. All five inter-grade.

To be continued.

NOTES AND NEWS

ADDITION TO THE RANGE OF *Pecten caurinus* GOULD.—In the NAUTILUS, Volume 51, No. 4, 1938, p. 144, I cited the northern range of *Pecten caurinus* as Kayak Island, Alaska, mentioned by Steller and Stejneger. During the course of field work in Alaska in 1938 G. D. Hanna definitely confirmed this northern record and stated that live specimens of the species were taken by fishermen some 60 miles north of this locality, off Channel Island, Orea Inlet, Cordova, Alaska, in 25 fathoms. Live specimens were dredged by G. D. Hanna, August, 1940, 2 miles W by S $\frac{1}{4}$ W of Fort Bragg Buoy, California, in 47 to 50 fathoms while on board the *N. B. Scofield*, of the State of California Division of Fish and Game. A fragment of a valve was dredged by Dr. Hanna from the same ship in 100 fathoms $17\frac{1}{4}$ miles, W $\frac{1}{2}$ N from Drakes Bay Buoy, Point Reyes, California. The range of the species as known